```
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
```

- protein search, using sw model OM protein March 15, 2005, 08:50:58 ; Search time 23 Seconds (without alignments) 51.930 Million cell updates/sec Run on:

US-09-897-465-10 104 1 GCCSLPPCALNNPDYC 16 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

513545 Total number of hits satisfying chosen parameters:

513545 segs, 74649064 residues

Searched:

seq length: 0 seq length: 200000000 Minimum DB E Maximum DB E

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

/cgn2 6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2 6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2 6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2 6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2 6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2 6/ptodata/1/iaa/PCTUS_COMB.pep:* Issued Patents AA:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Sequence 10, Appl	Sequence 9, Appli	12,	115,	Sequence 11, Appl	117,	358,	Sequence 67, Appl	133,	368,	125,	346,	77, 1	46,	46,	46,	46	'n	Sequence 5, Appli	é,	61, 7	324	344,	87, A	107		306,
SUMMARIES	ID	US-09-219-446B-10	US-09-219-446B-9	US-09-219-446B-12	-09	-219-4	US-09-493-795B-117	US-09-493-795B-358	-09-493	-09-493	-09-493	US-09-493-795B-125	US-09-493-795B-346	US-09-493-795B-77	08-137	US-08-477-383-46	US-08-487-174-46	US-08-480-750-46	US-08-857-068-2	-09	US-09-219-446B-6	US-09-493-795B-61	US-09-493-795B-324	US-09-493-795B-344	-09 - 493	-09-493	-09-49	US-09-493-795B-306
	DB	6	٣	е	4	М	4	4	4	4	4	4	4	4	-	Н	н	н	N	m	m	4	4	4	4	4	4	4
	Query Match Length	16	16	16	26	16	26	26	26	59	21	26	38	9	65	65	65	65	16	16	17	26	41	41	62	61	41	25
de	Query Match	100.0	95.2	95.2	91.3	90.4	87.5	79.8	76.9	76.9	76.0	76.0	72.1	72.1	72.1	72.1	72.1	72.1	71.2	71.2	71.2	71.2	68.3	67.3	67.3	ė.	62.9	65.4
	Score	104	66	66	95	94	91	83	80	80	79	79	75	75	75	75	75	75	74	74	74	74	71	70	70	69	68.5	68
	Result No.		~	m	4	ß	φ	7	6 0	თ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	56	27

Sequence 360, App	US-09-493-795B-360	4	62	62.5	65	45
m	-09-493-795B-3B	4	39	2	65	44
326,	09-493-795B-32	4	39	•	65	43
7	09-493-795B-1	4	64	ë.	99	42
89,	US-09-493-795B-89	4	62	63.5	99	41
63	US-09-493-795B-63	4	28	63.5	99	40
33	c i	4	38	63.5	99	39
<u>8</u>	US-09-493-795B-280	4	38	63.5	99	38
36	US-09-493-795B-366	4	24	63.5	99	37
27	US-09-493-795B-274	4	53	63.5	99	36
5	US-09-493-795B-151	4	50	63.5	99	35
'n	18-857-068-3	7	12	63.5	99	34
27	US-09-493-795B-276	4	41	64.4	67	33
32	US-09-493-795B-354	4	22	64.4	67	32
8, A <u>r</u>	US-09-219-446B-8	c	16	64.4	67	31
4	US-08-857-068-4	~	16	64.4	67	30
7	US-09-493-795B-149	4	57	65.4	68	59
28	09-493-	4	38	65.4	68	28

ALIGNMENTS

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OTHER INFORMATION: DESCRIPTION Of ARTIficial Sequence:AlOL derivative; OTHER INFORMATION: Of C. purpurascens PnlA US-09-219-446B-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Score 104; DB 3; Length 16; 100.0%; Pred. No. 2e-06; tive 0; Mismatches 0; Indels
                                                                                                                     APPLICANT: MICHOSA, Baldomero M.
APPLICANT: MICHOSA, J. Michael
APPLICANT: Yoshikami, Doju
APPLICANT: Yoshikami, Doju
APPLICANT: Yoshikami, Doju
APPLICANT: Luo, Siqin
APPLICANT: Luo, Siqin
APPLICANT: Luo, Siqin
APPLICANT: Luo, Siqin
APPLICANT: University of Utah Research Foundation
ITLE OF INVENTON: Uses of Alpha-Conctoxins
ITLE OF INVENTON: Uses of Alpha-Conctoxins
CURRENT PRILING DATE: 1998-12-23
PRIOR APPLICATION NUMBER: US 60/080, S88
PRIOR APPLICATION NUMBER: US 60/080, S88
PRIOR APPLICATION NUMBER: US 60/070,153
PRIOR APPLICATION UNMER: US 60/070,153
PRIOR APPLICATION NUMBER: US 60/070,153
PRIOR PLING DATE: 1997-12-31
NUMBER OF SEQ ID NOS: 13
SEQ ID NO 10
LENGTH: 16
                           ; Sequence 10, Application US/09219446B; Patent No. 6265541; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Matches 16; Conservative
US-09-219-446B-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
```

GCCSLPPCALNNPDYC 16 1 GCCSLPPCALNNPDYC 16 요 ઠ

ö

Olivera, Baldomero M.
McIntosh, J. Michael
Yoshikami, Doju
Tertier, G. Edward
Luo, Sigin
University of Utah Research Foundation ; Sequence 9, Application US/09219446B; Patent No. 626541; GENERAL INFORMATION: APPLICANT: Olivera, Baldomero M.; APPLICANT: Yoshikami, Doju; APPLICANT: Cartier, G. Edward; APPLICANT: Luo, Siqin; APPLICANT: University of Utah Research; APPLICANT: University of Utah Research US-09-219-446B-9

```
Query Match
Best Local Similarity 87.5%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCCSLPPCAASNPDYC 16
                                                                                                                                                                                                                                                                   ; TYPE: PRT
; ORGANISM: Conus pennaceus
US-09-493-795B-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                      LENGTH: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 95.2%; Score 99; DB 3; Length 16; Best Local Similarity 93.8%; Pred. No. 7.7e-06; Matches 15; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 95.2%; Score 99; DB 3; Length 16; Best Local Similarity 93.8%; Pred. No. 7.7e-06; Matches 15; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Yoshikami, Doju
APPLICANT: Yoshikami, Doju
APPLICANT: Yoshikami, Doju
APPLICANT: Cartier, G. Edward
APPLICANT: Luo, Siqin
APPLICANT: University of Utah Research Foundation
TITLE OF INVENTION: Uses of Alpha-Conotoxins
FILE REFERENCE: Uses of Alpha-Conotoxins
CURRENT APPLICATION NUMBER: US 60/080,588
FRIOR APPLICATION NUMBER: US 60/080,588
FRIOR APPLICATION NUMBER: US 60/080,588
FRIOR APPLICATION NUMBER: US 60/070,153
TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 115, Application US/09493795B
Patent No. 6/97908
GENERAL INFORMATION:
APPLICANT: Watking, Maren
APPLICANT: Olivera, Baldomero M.
APPLICANT: Hillyard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: McIntosh, J. Michael
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: Alpha-Conotoxin Peptides
FILE REFERENCE: 2314-179.A
                            FILE REFERENCE: Uses of Alpha-Conoccoxing
CURRENT APPLICATION NUMBER: US/09/219,446B
CURRENT FILING DATE: 1998-12-23
PRIOR APPLICATION NUMBER: US 60/080,588
PRIOR FILING DATE: 1998-04-03
PRIOR PILING DATE: 1997-12-31
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PATENTIN VET. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 3
18-09-219-446B-12
'Sequence 12, Application US/09219446B
'Patent No. 6265541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GCCSLPPCAANNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCCSLPPCALSNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Conus purpurascens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: Conus purpurascens
US-09-219-446B-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION: - APPLICANT: Olivera,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-493-795B-115
                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-219-446B-9
                                                                                                                                                                                                                                                                                                         SEQ ID NO 9
LENGTH: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઢ
```

```
CURRENT PAINO DATE: 1000-01-29

CURRENT PAINO DATE: 2000-01-29

FRICOR APPLICATION NUMBER: 1050-01-29

FRICOR APPLICATION NUMBER: 1050-01-29

FRICOR PARCH FILMS DATE: 3990-1-29

FRICOR PARCH TANNO DATE: 3990-1-29

FRICOR PARCH TO 113

CHARGE TO 114

CHARGE TO 1
```

ö

```
Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gape
                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            76.0%; Score 79; DB 4; Length 21; 75.0%; Pred. No. 0.0024; Live 1; Mismatches 3; Indels
                                                                                                   Query Match 76.9%; Score 80; DB 4; Length 56; Best Local Similarity 75.0%; Pred. No. 0.0045; Matches 12; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 76.9%; Score 80; DB 4; Length 59; Best Local Similarity 75.0%; Pred. No. 0.0047; Matches 12; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                         US-09-493-795B-133

US-09-493-795B-133

Sequence 133. Application US/09493795B

Patent No. 6797808

GENERAL INFORMATION:
APPLICANT: Watkins, Maren
APPLICANT: Hillyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: Holivera, Baldomero M.
APPLICANT: Holivera, Baldomero M.
APPLICANT: Hillyard, David R.
APPLICANT: Holivera, David R.
APPLICANT: Montosh, J. Michael
APPLICANT: Jones Robert M.
ITILE OF INVENTION: Abpha-Conotoxin Peptides
FILE REFERENCE: 2314-179.A
CURRENT APPLICATION NUMBER: US/09/493,795B
CURRENT FILING DATE: 1999-01-29

PRIOR FILING DATE: 1999-01-29

WUMBER OF SEQ ID NOS: 404

SEQ ID NO 133

LENGTH: 59

WANDER OF BALLING VET: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Malchais, malchais, Applicant: Mapplicant: Milyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: Milchosh, J. Michael
APPLICANT: Ornes, Robert M.
TITLE OF INVENTION: Alpha-Conotoxin Peptides
FILE REFERENCE: 2314-179.A
CURRENT APPLICATION NUMBER: US 60/118,381
PRIOR PPLICATION NUMBER: US 60/118,381
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SOFTWARE: Patentin Ver. 2.0
LENGTH: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-493-795B-368
; Sequence 368, Application US/09493795B
; Patent No. 6797808
; GENERAL INFORMATION:
; APPLICANT: Watkins, Maren
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40 GCCSRPPCIANNPDLC 55
                                                                                                                                                                                                        1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                     40 GCCSRPPCIANNPDLC 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 75.0 Matches 12; Conservative
     ; TYPE: PRT
; ORGANISM: Conus textile
US-09-493-795B-67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Conus dalli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-493-795B-133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-493-795B-368
                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 79.8%; Score 83; DB 4; Length 56; Best Local Similarity 81.2%; Pred. No. 0.002; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                               Query Match 87.5%; Score 91; DB 4; Length 56; Best Local Similarity 87.5%; Pred. No. 0.00022; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 67, Application US/09493795B
; Sequence 67, Application US/09493795B
; Patent No. 679780B
; GENERAL INFORMATION:
APPLICANT: Watkins, Maren
; APPLICANT: Olivera, Baldomero M.
APPLICANT: Hillyard, David R.
; APPLICANT: Hillyard, David R.
; APPLICANT: Hones, Robert M.
; TILLE OF INVENTION: Alpha-Conotoxin Peptides
; FILE REFERENCE: 2314-179.A
; CURRENT APPLICATION NUMBER: US/09/493,795B
; CURRENT APPLICATION NUMBER: US 60/118,381
; PRIOR APPLICATION NUMBER: US 60/118,381
; PRIOR PILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 404
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Olivera, Baldomero M.
APPLICANT: Hillyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: McIncosh, 1 Michael
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: Alpha-Conotoxin Peptides
FILE REFERENCE: 2314-179.A
CURRENT APPLICATION NUMBER: US/09/493,795B
CURRENT FILING DATE: 2000-01-29
NUMBER OF FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SOFTWARE: Patentin Ver. 2.0
LENGTH: 56
CURRENT FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/118,381
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 117
LENGTH: 56
TYPE: PRT
CORGANISM: Conus pennaceus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Sequence 358, Application US/09493795B
; Patent No. 6797808
: GENERAL INFORMATION:
; APPLICANT: Watkins, Maren
                                                                                                                                                                                                                                                                                                                                                                                  1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                 40 GCCSHPPCFLNNPDYC 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40 GCCSHPPCAQNNQDYC 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Conus obscurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-493-795B-358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-493-795B-358
                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
```

ö

ö

ઠે

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 72.1%; Score 75; DB 4; Length 60; Best Local Similarity 68.8%; Pred. No. 0.019; Matches 11; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: CALLAGORIA BAIDOMETO M. APPLICANT: CALLAGORIA LINUTAGORIA BAIDOMETO M. APPLICANT: CTUZ, LOUTGES J. APPLICANT: HILYAZA'D DAVÍA R. APPLICANT: MCINCOSH, J. Michael APPLICANT: Santos, Ameurfina D. TITLE OF INVENTION: Conotoxin Peptides NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS: ADDRESSE: Venable, Baetjer, Howard & Civiletti STREET: 1201 New York Avenue N.W., Suite 1000 CITY: Washington STATE: DC
ZIP: 20005
COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
                   Sequence 77, Application US/09493795B
Fatent No. 679308
GENERAL INFORMATION:
APPLICANT: Watkins, Maren
APPLICANT: Olivera, Baldomero M.
APPLICANT: Hillyard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: Jones, Robert M.
ITILE OF INVENTION: Alpha-Conotoxin Peptides
FILE REFERENCE: 2314-179.A
CURRENT APPLICATION NUMBER: US 60/118,381
FRIOR APPLICATION NUMBER: US 60/118,381
FRIOR FILING DATE: 1999-01-29
FRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SOFTWARE PATENTIN Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/M3-DOS
SOFTWARE: Wordberfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/137,800
FLING DATE: 19-OCT-1993
CLASSIFICATION: 530
ATTORNEY/AGENT INPORMATION:
NAME: Innen, Jeffrey L.
REFERENCE/DOCKET NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 24260-104763
TELECOMMUNICATION INPORMATION:
TELECOMMUNICATION INPORMATION:
TELECOMMUNICATION INPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 46, Application US/08137800 Patent No. 5514774 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   44 GCCSHPACSVNNPDIC 59
                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT;
; ORGANISM: Conus bandanus
US-09-493-795B-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: 202-962-8300
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HYPOTHETICAL: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: linear
MOLECULE TYPE: pepi
  US-09-493-795B-77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 77
LENGIH: 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Suery Match 76.0%; Score 79; DB 4; Length 56; Best Local Similarity 75.0%; Pred. No. 0.0059; Matches 12; Conservative 1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72.1%; Score 75; DB 4; Length 38; 68.8%; Pred. No. 0.012; iive 2; Mismatches 3; Indels
                                                                                                                                                 Sequence 125, Application US/09493795B

Fatent No. 6797808

GENERAL INFORMATION:
APPLICANT: Warkins, Maren
APPLICANT: Olivera, Baldomero M.
APPLICANT: Hillyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: Alpha-Conotoxin Peptides
FILE REFERENCE: 2314-179. A.
CURRENT APPLICATION NUMBER: US/09/493,795B
PRIOR FILING DATE: 2000-01-28
PRIOR FILING DATE: 1999-01-29

NUMBER OF SEQ ID NOS: 404

SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 346, Application US/09493795B
Fatent No. 679780B
GENERAL INFORMATION:
APPLICANT: Watkins, Maren
APPLICANT: Olivera, Baldomero M.
APPLICANT: Hilyard, David R.
APPLICANT: Jones, Mohert M.
APPLICANT: Jones, Abha-Conotoxin Peptides
FILE REFERENCE: 2314-179.A
CURRENT FILING DATE: 2000-01-28
FILE REPERTOR INVENTION NUMBER: US 60/118,381
FRIOR APPLICATION NUMBER: US 60/118,381
FRIOR PILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SEQ ID NO 346
LENGTH: 38
1 GCCSLPPCALNNPDYC 16
                          5 GCCSDPSCNVNNPDYC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40 GCCSDPRCNMNPDYC 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22 GCCSHPACSVNNPDIC 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT

ORGANISM: Conus episcopatus
US-09-493-7958-125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT
; ORGANISM: Conus marmoreus
US-09-493-795B-346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 11; Conserva
                                                                                                                                US-09-493-795B-125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 12
US-09-493-795B-346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
```

상, 명

RESULT 13

; 0

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                             Gaps
                                                                                                                                                          ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                           Query Match 72.1%; Score 75; DB 1; Length 65; Best Local Similarity 68.8%; Pred. No. 0.02; Matches 11; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 72.1%; Score 75; DB 1; Length 65; Best Local Similarity 68.8%; Pred. No. 0.02; Matches 11; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: U.S.A.

ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENT PC-DOS/MS-DOS
SOFTWARE: PATENT PROTA:
APPLICATION NUMBER: US/08/477,383
FILING DATE: 07-JUN-1995
FILING DATE: 19-OCT-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/137,800
FILING DATE: 19-OCT-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/084,848
FILING DATE: 29-JUN-1993
ATPOREY/AGENT INFORMATION:
APPLICATION NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 28,957
REFERENCE/DOCKET NUMBER: 28,957
TELECOMMUNICATION INFORMATION:
TELEPRAX: 202-962-4810
INFORMATION FOR SEQ ID NO: 46:
SEQUENCE CHARACTERISTICS:
LENGTH: 65 anino acids
TYPEND STRANDEDNESS:
TODOLOGY: STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Olivera, Baldomero M.
APPLICANT: Clivera, Baldomero M.
APPLICANT: Cruz, Lourdes J.
APPLICANT: Cruz, Lourdes J.
APPLICANT: Macintosh J. Michael
APPLICANT: Macintosh, J. Michael
APPLICANT: Santos, Ameurfino S.
TITLE OF INVENTION: Conotoxin Peptides
NUMBER OF SEQUENCES: 59
CORRESPONDENCE ADDRESS:
ADDRESSE: 1201 New York Avenue, N.W., Suite 1000
CITY: Washington
STATE: DC
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                        Sequence 46, Application US/08477383; Patent No. 5589340; GENERAL INFORMATION:
                                                                                                                                                                                                       1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                              49 GCCSHPACSVNNPDIC 64
                                              Conus bandanus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Conus bandanus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: peptide
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Con
US-08-137-800-46
                                                                                                                                                                                                                                                                                                                   RESULT 15
US-08-477-383-46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-477-383-46
                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                            셤
```

1 GCCSLPPCALNNPDYC 16

= ----=

```
Db 49 GCCSHPACSVNNPDIC 64
Search completed: March 15, 2005, 09:13:58
Job time: 23 secs
```

THIS PAGE BLANK (USPTO)

```
March 15, 2005, 08:50:58 ; Search time 1141 Seconds (without alignments) 4.625 Million cell updates/sec
                                                                                                                                                                                                                                                                                                       GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                     1396920 segs, 329844858 residues
                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                         - protein search, using sw model
                                                                                                                                                   BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                      104
1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                               Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                          US-09-897-465-10
                                                                                                         Title:
Perfect score:
Sequence:
                                                                                                                                                      Scoring table:
                                         OM protein
                                                                                                                                                                                                                                                                                                             Database:
                                                                                                                                                                                     Searched:
                                                               Run on:
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Description	Sequence 10, Appl	Sequence 10, Appl	Sequence 9, Appli	Sequence 12, Appl	Sequence 9, Appli	Sequence 12, Appl	Sequence 115, App	Sequence 11, Appl	Sequence 11, Appl	Sequence 117, App	Sequence 358, App	Sequence 67, Appl	Sequence 133, App
1	ID	US-09-897-465-10	US-10-827-369-10	US-09-897-465-9	US-09-897-465-12	US-10-827-369-9	US-10-827-369-12	US-10-895-372-115	US-09-897-465-11	US-10-827-369-11	US-10-895-372-117	US-10-895-372-358	US-10-895-372-67	US-10-895-372-133
	DB	6	16	6	0	16	16	17	0	16	17	17	17	11
	t Query Match Length DB	16	16	16	16	16	16	26	16	16	56	26	26	59
ď	Query Match	100.0	100.0	95.2	95.2	95.2	95.2	91.3	90.4	90.4	87.5	79.8	76.9	6.92
	Score	104	104	66	66	66	66	95	94	94	91	83	80	80
	Result No.	-	7	٣	4	S	9	7	æ	6	10	11	12	13

213	, 5, 2	6	61,	99	Sequence 406, App Sequence 324, App	61	٠.	-	ednence	_	•	_	•	• •	• •	٠,	•••	Sequence 149, App	œ	63	æ,	354	276	443	-
US-10-895-372-368 US-10-895-372-125 US-10-895-372-346	US-10-895-372-77 US-09-897-465-5 US-10-827-369-5	US-09-897-465-6	US-10-827-369-6 US-10-895-372-61	US-10-072-602B-604	US-10-072-602B-406 US-10-895-372-324	US-10-072-602B-618	US-10-895-372-344	US-10-895-372-87	US-10-072-602B-446	US-10-072-602B-615	US-10-072-602B-437	US-10-072-602B-609	US-10-072-602B-419	US-10-895-372-107	US-10-895-372-278	US-10-895-372-306	US-10-895-372-282	US-10-895-372-149	US-09-897-465-8	-	US-10-827-369-8	-10-	US-10-895-372-276	US-10-072-602B-443	US-10-895-372-151
17 17 17	9 17	9	17	14	17	14	11	11	14	14	14	14	14	17	11	11	11	11	σ	14	16	17	11	14	17
21 56 38	60 16	17	17. 56	19	41	17	41	62	63	17	63	17	61	61	41	25	38	57	16	16	16	22	41	57	20
76.0 76.0 72.1	72.17	71.2	71.2	69.2	69.2	67.3	67.3	67.3	67.3	8.99	66.8	66.3	66.3	66.3	62.9	65.4	65.4	65.4	64.4	64.4	64.4	64.4	64.4	64.4	63.5
79 75 75	7 7 7 5 4 7 5	4.	7.4	72	72	20	70	70	70	69.5		69	69	69	68.5	69	68	69	67	67	67			67	99
14 15 16	17 18	183	22	23	2.2	26	27	28	53	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

ALIGNMENTS

```
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; OTHER INFORMATION: Description of Artificial Sequence:A10L derivative; OTHER INFORMATION: of C. purpurascens PnIA US-09-897-465-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 100.0%; Score 104; DB 9; Length 16; Best Local Similarity 100.0%; Pred. No. 7.3e-07; Matches 16; Conservative 0; Mismatches 0; Indels
us-uy-897-465-10

Sequence 10 Application US/09897465

Factor No. US2002202215A1

GENERAL INFORMATION:

APPLICANT: Olivera, Baldomero M.

APPLICANT: McIntosh, J. Michael

APPLICANT: Yoshikami, Doju

APPLICANT: Voshikami, Doju

APPLICANT: University of Utah Research Foundation

TITLE OF INVENTION: Uses of Alpha-Conotoxin S

FILE REFERENCE: Uses of Alpha-Conotoxin S

CURRENT FILING DATE: 2001-07-03

PRIOR APPLICATION NUMBER: US 60/080,588

PRIOR PILING DATE: 1997-12-31

NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentin Ver: 2.0

LENGTH: 16

LENGTH: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Artificial Sequence FEATURE:
```

1 GCCSLPPCALNNPDYC 16

ö

ò

1 GCCSLPPCALNNPDYC 16

엄

```
OTHER INFORMATION: Description of Artificial Sequence: AlOL derivative CTHER INFORMATION: of C. purpurascens PnIA US-10-827-369-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                           STREAM INFORMATION:

APPLICANT: Olivera, Baldomero M.

APPLICANT: McIntosh, J. Michael

APPLICANT: Yoshikami, Doju

APPLICANT: Cartier, G. Edward

APPLICANT: Cartier, G. Edward

APPLICANT: University of Utah Research Foundation

TILLE OF INVENTION: Uses of Alpha-Conotoxin Peptides

FILE REPERBUE: 2314-278

CURRENT APPLICATION NUMBER: US/10/827,369

CURRENT FILING DATE: 2004-04-20

PRIOR APPLICATION NUMBER: US 09/897,465

PRIOR APPLICATION NUMBER: US 09/219,446

PRIOR FILING DATE: 1998-12-23

PRIOR FILING DATE: 1998-12-23

PRIOR FILING DATE: 1998-12-23

PRIOR PELING DATE: 1998-12-33

PRIOR FILING DATE: 1998-12-31

NUMBER OF SEQ ID NOS: 13

SOFTWARE PLANCY NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOSEPH NO. US200202715A1

GENERAL INFORMATION:
APPLICANT: Olivera Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: McIntosh, J. Michael
APPLICANT: Yoshikami, Doju
APPLICANT: Yoshikami, Doju
APPLICANT: Cartier, G. Edward
APPLICANT: University of Utah Research Foundation
ITILE OF INVENTION: Uses of Alpha-Conotoxins
CURRENT APPLICANT: UNIVERSITY Of Utah Research Foundation
FILE REFERENCE: Uses of Alpha-Conotoxins
CURRENT APPLICATION NUMBER: US 60/080,588
FRIOR APPLICATION NUMBER: US 60/080,588
FRIOR APPLICATION NUMBER: US 60/080,588
FRIOR PRILING DATE: 1998-04-03
FRIOR PRILING DATE: 1998-04-03
FRIOR PRILING DATE: 1997-12-31
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PATENTIN VET: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 104; DB 16;
100.0%; Pred. No. 7.3e-07;
Live 0; Mismatches 0;
                       Sequence 10, Application US/10827369
Publication No. US20040192610A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CRGANISM: Conus purpurascens
US-09-897-465-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.0
Matches 16; Conservative
US-10-827-369-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -09-897-465-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠે
```

ö

Gaps

ö

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                         Gaps
                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
Score 99; DB 9; Length Lo;
Pred, No. 3.2e-06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 95.2%; Score 99; DB 9; Length 16; Best Local Similarity 93.8%; Pred. No. 3.2e-06; Matches 15; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                 Sequence 12, Application US/09897465
; Sequence 12, Application US/09897465
; Patent No. US2002002715A1
; GENERAL INFORMATION:
; APPLICANT: Olivera, Baldomero M.
; APPLICANT: McIncosh, J. Michael
; APPLICANT: Cartier, G. Edward
; APPLICANT: Cartier, G. Edward
; APPLICANT: Luo, Sidin
; APPLICANT: Uno, Sidin
; APPLICANT: Uses of Alpha-Conotoxin Sidin
; TITLE OF INVENTION: Uses of Alpha-Conotoxin Sidin
; CURRENT APPLICATION NUMBER: US 60/080, 588
; PRIOR FILING DATE: 1998-04-03
; PRIOR FILING DATE: 1997-12-31
; NUMBER: OF SEQ ID NOS: 13
; SOFTWARE: Patentin Ver. 2.0
; FENCINE OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JAPALICANT: Olivera, Baldomero M.

JAPALICANT: MCIRLOSH, J. Michael

APPLICANT: Yoshikami, Doju

APPLICANT: Yoshikami, Doju

APPLICANT: Yoshikami, Doju

APPLICANT: Luo, Siqin

APPLICANT: University of Utah Research Foundation

TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides

TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides

CURRENT APPLICATION NUMBER: US/10/827,369

CURRENT FILING DATE: 2004-04-20

PRIOR FILING DATE: 1998-12-23

PRIOR FILING DATE: 1998-12-23

PRIOR APPLICATION NUMBER: US 60/080,588

PRIOR FILING DATE: 1998-04-03

SOFTWARE: PATCHTON NUMBER: US 60/070,153

PRIOR FILING DATE: 1997-12-31

NUMBER OF SEQ ID NOS: 13

SOFTWARE: PATCHTON NOS: 13

LEMOTH: 16
                    Query Match 95.2%; Score 99; DB Best Local Similarity 93.8%; Pred. No. 3.2e Matches 15; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 9, Application US/10827369
Publication No. US20040192610A1
GENERAL INFORMATION:
                                                                                                                                      1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                        1 GCCSLPPCAANNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCCSLPPCALSNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Conus purpurascens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-897-465-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JS-10-827-369-9
                                                                                                                                         ઠે
                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
Query Match 91.3%; Score 95; DB 17; Length 56; Best Local Similarity 87.5%; Pred. No. 3.4e-05; Matches 14; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                              40 GCCSHPPCAMNNPDYC 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GCCSLPPCAASNPDYC 16
                                                                                                                                                                                                                  1 GCCSLPPCALNNPDYC 16
                         TYPE: PRT
ORGANISM: Conus pennaceus
US-10-895-372-115
  LENGTH: 56
                                                                                                                                                                                                                                                                                                                                        RESULT 8
                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                     ઠ
                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                        Gaps
                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 95.2%; Score 99; DB 16; Length 16; Best Local Similarity 93.8%; Pred. No. 3.2e-06; Matches 15; Conservative 1; Mismatches 0; Indels
                                                                      Length 16;
                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                         US-10-827-369-12

Sequence 12, Application US/10827369

Publication No. US20040192610A1

SERERAL INFORMATION:

APPLICANT: Olivera, Baldomero M.

APPLICANT: Olivera, Baldomero M.

APPLICANT: Yoshikami, Doju

APPLICANT: Cartier, G. Edward

APPLICANT: University of Utah Research Foundation

TITLE OF INVENTION: Uses of Alpha-Conotoxin Peptides

FILE REFERENCE: 2314-278

CURRENT APPLICATION UNMER: US/10/827,369

CURRENT APPLICATION NUMBER: US 09/897,465

PRIOR FILING DATE: 2001-07-03

PRIOR FILING DATE: 2001-07-03

PRIOR FILING DATE: 1998-12-23

PRIOR FILING DATE: 1998-12-23

PRIOR FILING DATE: 1998-12-23

PRIOR FILING DATE: 1998-12-23

NUMBER OF SEQ ID NOS: 13

SOFTWARE: PATENTIN VONER: US 60/070,153

NUMBER OF SEQ ID NOS: 13

SEQ FUNCE: 110-12-12-13

LENGTH: 16
                                                                   Query Match 95.2%; Score 99; DB 16; Best Local Similarity 93.8%; Pred. No. 3.2e-06; Matches 15; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 115, Application US/10895372

Publication No. US20050032705A1

GENERAL INFORMATION:

APPLICANT: Watkins, Maren

APPLICANT: Watkins, Maren

APPLICANT: Millyard, David R.

APPLICANT: Millyard, David R.

APPLICANT: Millyard, David R.

APPLICANT: Millyard, David R.

TITLE OF INVENTION: Alpha-Conotoxin Peptides

FILE REFERENCE: 2314-286

CURRENT APPLICATION NUMBER: US/10/895,372

CURRENT FILING DATE: 2004-07-21

PRIOR FILING DATE: 2000-01-28

PRIOR FILING DATE: 2000-01-29

PRIOR FILING DATE: 1999-01-29

NUMBER OF SEQ ID NOS: 404

SOFFWARE: Patentin Ver: 2.0

SEQ ID NO 115
                                                                                                                                                                  1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                 1 GCCSLPPCAANNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GCCSLPPCALSNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: PRT
; ORGANISM: Conus purpurascens
US-10-827-369-12
; ORGANISM: Conus purpurascens
US-10-827-369-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-895-372-115
                                                                                                                                                                     8
                                                                                                                                                                                                           g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
   Gарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) OTHER INFORMATION: Description of Artificial Sequence:N11S derivative; OTHER INFORMATION: of C. purpurascens PnIA US-09-897-465-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Сарв
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                      APPLICANT: INTERNATION, A Michael
APPLICANT: McIncesh, J. Michael
APPLICANT: Yoshikami, Doju
APPLICANT: Yoshikami, Doju
APPLICANT: Yoshikami, Doju
APPLICANT: Luo, Siqin
APPLICANT: Luo, Siqin
APPLICANT: Luo, Siqin
APPLICANT: University of Utah Research Foundation
TITLE OF INVENTION: Uses of Alpha-Conotoxins
TITLE OF INVENTION: Uses of Alpha-Conotoxins
TITLE APPLICATION NUMBER: US/09/897,465
CURRENT FILING DATE: 1998-04-03
PRIOR APPLICATION NUMBER: US 60/080,588
PRIOR FILING DATE: 1998-04-03
PRIOR APPLICATION NUMBER: US 60/070,153
PRIOR FILING DATE: 1997-12-31
NUMBER OF SEQ ID NOS: 13
SEQ ID NO 11
LENGTH: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JAPPLICANT: Olivera, Baldomero M.
APPLICANT: McIntosh, J. Michael
APPLICANT: Yeshikami, Doju
APPLICANT: Yeshikami, Doju
APPLICANT: Yeshikami, Doju
APPLICANT: Luo, Siqin
APPLICANT: Luo, Siqin
APPLICANT: Luo, Siqin
TITLE OF INTENTION: Uneseity of Utah Research Foundation
TITLE OF INTENTION: University of Utah Research Foundation
TITLE OF INTENTION: Uses of Alpha-Conotoxin Peptides
CURRENT APPLICATION NUMBER: US/10/827,369
CURRENT APPLICATION NUMBER: US 09/897,465
PRIOR APPLICATION NUMBER: US 09/897,465
PRIOR APPLICATION NUMBER: US 09/219,446
PRIOR FILING DATE: 1998-12-23
PRIOR FILING DATE: 1998-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 90.4%; Score 94; DB 9; I
Best Local Similarity 87.5%; Pred. No. 1.4e-05;
Matches 14; Conservative 1; Mismatches 1;
                                                                                                                                                                                                                                                                    ; Sequence 11, Application US/09897465; Patent No. US20020022715A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-827-369-11
; Sequence 11, Application US/10827369
; Publication No. US20040192610A1
; GENERAL INFORMATION:
```

```
US-10-895-372-67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-895-372-133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-895-372-67
                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                           ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                             ) OTHER INFORMATION: Description of Artificial Sequence: N11S derivative ; OTHER INFORMATION: of C. purpurascens PnIA US-10-827-369-11
                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                          Query Match 90.4%; Score 94; DB 16; Length 16; Best Local Similarity 87.5%; Pred. No. 1.4e-05; Matches 14; Conservative 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 87.5%; Score 91; DB 17; Length 56; Best Local Similarity 87.5%; Pred. No. 0.00011; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 117, Application US/10895372
FUDDICACTION NO. UG20050032705A1
GENERAL INFORMATION:
APPLICANT: Watkins, Maren
APPLICANT: Olivera, Baldomero M.
APPLICANT: Millyard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: Appla-Conotoxin Peptides
FILE REPRENCE: 2314-286
CURRENT APPLICATION NUMBER: US/10/895,372
CURRENT APPLICATION NUMBER: US 09/493,795
PRIOR APPLICATION NUMBER: US 09/493,795
PRIOR APPLICATION NUMBER: US 09/493,795
PRIOR PELING DATE: 2000-01-28
PRIOR PELING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SSCTWARE PLING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SSCTWARE PLING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SSCTWARE: PATENTING NUMBER: BENTALLY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Olivera, Baldomero M.
APPLICANT: Hillyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: Morthcoh, J. Michael
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: Alpha-Conotoxin Peptides
FILE REFERENCE: 234-286
CURRENT APPLICATION UNBER: US/10/895,372
CURRENT FILING DATE: 2004-07-21
PRIOR APPLICATION NUMBER: US 09/493,795
PRIOR FILING DATE: 1998-04-03
PRIOR PELLONG NUMBER: US 60/070,153
PRIOR FILING DATE: 1997-12-31
NUMBER OF SEQ ID NOS: 13
SEQ ID NO 11
LENGTH: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 358, Application US/10895372
Publication No. US20050032705A1
GENERAL INFORMATION:
APPLICANT: Watkins, Maren
APPLICANT: Olivera, Baldomero M.
                                                                                                                                                                       TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GCCSLPPCAASNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40 GCCSHPPCFLNNPDYC 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: PRT
; ORGANISM: Conus pennaceus
US-10-895-372-117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
US-10-895-372-358
                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

```
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  79.8%; Score 83; DB 17; Length 56; 81.2%; Pred. No. 0.0012; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 76.9%; Score 80; DB 17; Length 56; Best Local Similarity 75.0%; Pred. No. 0.0029; Matches 12; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Machalls, material
APPLICANT: Olivers, Baldomero M.
APPLICANT: Hillyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: Alpha-Conotoxin Peptides
TITLE REFERENCE: 2314-286
CURRENT APPLICATION NUMBER: US 10/495,372
CURRENT FILING DATE: 2004-07-21
PRIOR PAPLICATION NUMBER: US 69/493,795
PRIOR PELING DATE: 1000-01-28
PRIOR PILING DATE: 1000-01-28
PRIOR FILING DATE: 1000-01-28

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 133, Application US/10895372
Fublication No. US20050032705A1
GENERAL INFORMATION:
APPLICANT: Watkins, Maren
APPLICANT: Hillyard, David R.
APPLICANT: Hillyard, David R.
APPLICANT: Millyard, David R.
APPLICANT: Millyard, David R.
APPLICANT: Millyard, David R.
APPLICANT: Millyard, David R.
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: Alpha-Conotoxin Peptides
CURRENT APPLICATION NUMBER: US/10/895,372
CURRENT FILING DATE: 2004-07-21
PRIOR FILING DATE: 2000-01-28
PRIOR FILING DATE: 2000-01-28
PRIOR FILING DATE: 1999-01-29
PRIOR FILING DATE: 2000-01-28
PRIOR PEDILORION NUMBER: US 60/118,381
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SEQ ID NOS: 404
SEQ ID NO 358
LENGTH: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 67, Application US/10895372
Publication No. US20050032705A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40 GCCSHPPCAQNNQDYC 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40 GCCSRPPCIANNPDLC 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Conus obscurus
US-10-895-372-358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Watkins, Maren APPLICANT: Olivera, Baldo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
```

```
ઠે
                                                                                                                                                                    g
                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 76.0%; Score 79; DB 17; Length 21; Best Local Similarity 75.0%; Pred. No. 0.0016; Matches 12; Conservative 1; Mismatches 3; Indels
                                                                                                                       Query Match 76.9%; Score 80; DB 17; Length 59; Best Local Similarity 75.0%; Pred. No. 0.0031; Matches 12; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                       Sequence 125, Application US/10895372
Publication No. US20050032705A1
GENERAL INFORMATION:
APPLICANT: Watkins, Maren
APPLICANT: Wilvera, Baldomero M.
APPLICANT: Milyard, David R.
APPLICANT: Milyard, David R.
APPLICANT: McIntosh, J. Michael
APPLICANT: McIntosh, J. Michael
APPLICANT: Jones, Robert M.
TITLE OF INVENTION: Alpha-Conotoxin Peptides
CURRENT APPLICATION NUMBER: US/10/895,372
CURRENT FILING DATE: 2004-07-21
FRIOR APPLICATION NUMBER: US 69/493,795
FRIOR PILING DATE: 1999-01-28
FRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 404
SOFFWARE: Patentin Ver: 2.0
                                                                                                                                                                                    1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GCCSLPPCALNNPDYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S GCCSDPSCNVNNPDYC 20
                                                                                                                                                                                                                 40 GCCSRPPCIANNPDLC 55
NUMBER OF SEQ ID NOS: 404
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Conus omaria
US-10-895-372-368
                                             ; LENGTH: 59
; TYPE: PRT
; ORGANISM: Conus dalli
US-10-895-372-133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 15
US-10-895-372-125
                                                                                                                                                                                                                                                                              US-10-895-372-368
                                                                                                                                                                                      ઠે
                                                                                                                                                                                                            ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

THIS PAGE BLANK (USPTO)